

Benoît JEAUROND

Software Engineer with an interest in AI, mobile, and low-level technologies

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EDUCATION

○ **Bachelor of Applied Science, Software Engineering** | University of Ottawa CGPA: 9.53/10
2017 – 2022

— Earned the **Chancellor's Scholarship**, Dean's Excellence, and Award Nortel Founding Scholarship for the SITE

● CAPSTONE PROJECT

— Developed a **machine learning** based Ransomware detection Python service using **PySpark** Random Forests, receiving SYSMON logs from Kafka, and monitoring with a mix of Grafana, Kibana, and Jaeger

● ENGINEERING TEAMS

— Member of uOttawa's Robobot Team for **3 years**, was the **team and software lead** leading meetings, organizing tasks, following up with members, and working on my assigned tasks. Also, worked on image detection of buoys using ROS, OpenCV, and Tensorflow in Python.

— Member of uOttawa's Mars Rover Team, worked on organizing the software team using my background from Robobot, created React dashboard to monitor and control the rover using ROSLib.js, and integrated IMU in the map generation

● HACKATHONS

— Organized and volunteered at the **CANDEV data challenge** for Statistics Canada

— Attended two **uOttHack** Hackathons, creating a mobile game with OpenGL and mobile hospital kiosk applications using Firebase

EXPERIENCE

○ **Software Developer** | Cision Canada
SUMMER 2021

— Developed **Java** features and fixed Java/Groovy bugs related to news article and social media ingestion

— Added features to internal Apache **Kafka** tools, such as an interactive UI and SSL support

— Defined and created a process to deploy application streams to QA and production **Spring Cloud Dataflow** (SCDF)

— Automated SCDF stream updates, application registration and deployment, as well as Docker image management in AWS Elastic Container Registry from **Atlassian Bamboo**

○ **Software Developer** | Innovation, Science and Economic Development Canada
SUMMER & FALL 2020

— Developed features for a work social media platform in **JavaScript** using **React** with an **express.js** backend

— Implemented **Jest** testing, **SwaggerUI** documentation, and multilingual database structure for the backend

— Improved **stability** and **performance** of the overall application by cleaning up the whole codebase

— Created **Github Actions** and **Openshift/Kubernetes** templates for server deployments alongside Jenkins integration

○ **Software Developer** | Ario Platform
FALL 2019

— Developed features for the platform in **Ruby on Rails** and **Angular** using **Test Driven Development**

— Improved **performance** and **security** of file downloads and uploads of the platform

— Worked on a **encrypted** file transfer and database attributes in Ruby and Ruby on Rails respectively

— Created **background jobs** to make **asynchronous** processes, that were previously synchronous

○ **Software Developer** | Innovation, Science and Economic Development Canada

WINTER 2019

- Developed a **React Native** application to ease the time management for students
- Integrated **Google Calendar** as our calendar/events database and used it to compare schedules
- Added **Firebase** to send notifications between users and to collect information about the users
- Created and implemented the design for the application in **Adobe XD**
- Integrated the CI/CD for our application with **CircleCI** (building, testing, linting, and deployment)

○ **Junior Officer for Community Enablement** | Treasury Board of Canada Secretariat

SUMMER 2018

- Extracted data from online databases with **JavaScript injections** and **Python automation**
- Created Excel spreadsheets from injections' data (JSON databases) with Python
- Created executive profiles from the Excel database with VBA macros
- Linked the NOC 2016 codes with the O*NET-SOC 2010 codes with VBA in Excel



PROJECTS

● **DRAW AWAY**

- Built a real-time drawing game, similar to Jackbox, with a **Rust** backend, a **React Native** and **React** frontend
- Created two **open source** NPM packages, an inspection tool to debug front-end state management Recoil.js library and a data-driven SVG based React Native drawing component
- Deployed using horizontally scalable backend microservices on **Kubernetes** in DigitalOcean

● **REACT NATIVE VISUAL SCRIPTING**

- Developed a fast Rust based React Native project creator, converting data to functioning React Native mobile application (including React components and React Navigation screens and navigators)

● **NETCHEK**

- Programmed a **network monitoring system** using a Raspberry Pi and a **GraphQL** server deployed in a DigitalOcean droplet interfacing a React Native client with **Apollo** managing GraphQL calls and **redux** for the state

● **JAVA FX**

- Developed multiple **JavaFX games**, such as Tetris, Sudoku, Poker, TicTacToe, and Snake

● **PORTFOLIO**

- Created a personal website in **React** which populates its content from the GitHub API with **Gatsby.js**

References available upon request